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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/538,163

## Applicant(s)

GRANT ET AL.

## Examiner

Hyun Nam

## Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 2,11,14-18,20 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12,13,19,21-26 and 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/22/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/22/2008 has been entered.

### ***Claim Rejections - 35 USC § 112 2nd***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-10, 12, 13, 19, 21-26, and 28-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Use of the phrase 'receiving an input signal associated with an actuation of one of plurality of user interface members' in claim 1 fails to particularly point out and distinctly claim the subject matter because the phrase can be parsed in multiple ways to derive at the scopes of the claim that are contradicting to each other. For the purpose of this Examination, the phrase is parsed to mean, 'receiving an input signal (of or from one of plurality of user interface members) associated with an actuation.

Use of the words 'associated' or 'associating' in claims 1, 6, 10, 13, 19, and 25 fails to particularly point out and distinctly claim the subject matter because it is uncertain how the claimed elements are associated with each other (i.e. associated by color, shape, frequency, form, letter, similarity, distinctions, etc.).

User of the term, 'program code' in claims 10, 12, 13, 19, 23, 26, 30, and 31 fails to particularly point out and distinctly

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claim the subject matter because the origin of antecedence is unclear.

Claim 26 recites the limitation "the second handheld communication device" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the stimuli" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recite an apparatus (a handheld communication device) and method steps ('user is to touch the user-interface member'). A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. \* > IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005); < Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

Applicant is required to review the claim and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-10, 12, 13, 19, 21-26, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by the Kaaresoja et al. (U.S. Publication Number 2002/0177471) hereinafter Kaaresoja '471.

Referring to claim 1, Kaaresoja '471 teaches, as claimed, a method, comprising:

receiving an input signal (see Fig. 1, a signal from Keypad 108 to Controller 106) associated with an actuation of one of a plurality of user-interface members (a key of keys on

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keypad, see Fig. 1, Keypad 108 and Paragraph 17, Line 6;

Note, when user press the key to select a menu item, a mobile phone receives an input signal associated with actuation) on a first handheld communication device (mobile phone, see Paragraph 17, Line 2);

assigning a haptic code (a tactile icon, see Paragraph 17, Lines 6-7, and Fig. 2; Note, type of haptic codes shown in Figure 2 is assigned to a tactile icon) associated with the actuation (see Fig. 1, data path labeled, 'instruction on how to interpret a tactile sensation pattern');

including the haptic code in an output signal (message, see Paragraph 24, Line 11); and

sending the output signal from a remote handheld communication device (mobile phone, see Paragraph 17, Line 2; Note, one ) remote from the first handheld communication device (see Paragraph 24, Lines 9-11; Note, tactile icons composed from one device is sent to another remote device), with said actuation occurring in response to said haptic

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code being received by the first handheld device (Note, when the message from the first mobile phone is played back on the second mobile phone, the actuation/vibration is occurring in response to message being selected from first mobile phone).

As to claim 3, Kaaresoja '471 teaches, the method of claim 1 wherein sending further includes in the output signal at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Paragraph 18, Line 4), and a graphical feature (pictures, see Paragraph 18, Line 3).

As to claim 4, Kaaresoja '471 teaches, the method of claim 1 wherein the haptic code is associated with a predetermined scheme (see Fig. 1, stored vibration pattern 140e; Note, predetermined vibrations patterns are stored in the memory for later determination of tactile sensation to be sent or received).

As to claim 5, Kaaresoja '471 teaches, the method of claim 1 wherein receiving further includes defining the one of the user-interface members (see Paragraph 17, Line 6; Note, a menu item



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is defined to the key in the keypad) include at least one of a key, a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member listed above).

receiving an input signal associated with an actuation of one of a plurality of user-interface members on a first handheld communication device;

Referring to claim 6, Kaaresoja '471 teaches, as claimed, a method, comprising:

receiving an input signal (see Fig. 1, a signal from Keypad 108 to Controller 106) at a first handheld communication device (mobile phone, see Paragraph 17, Line 2), said first handheld communication device including a plurality of user-interface members (a key of keys on keypad, see Fig. 1, Keypad 108);

outputting a request (providing instruction, see Paragraph 31, Line 12) from the first handheld communication device, the request providing a perceivable stimuli (command the

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vibration motor, see Paragraph 31, Line 13; Note, vibration is a perceivable stimuli) by a user (caller) of the first handheld communication device, with stimuli identifying a subset (a key on Keypad 108) of the plurality of user-interface members (creating vibration pattern, see Paragraph 31, Line 10; Note, when caller is selecting the vibration pattern from the menu, the caller identifies the type of vibration with a key selected from the keypad); and

providing a control signal (see Fig. 1, data path labeled 'control signal) to an actuator (see Fig. Vibration motor 100; Note, a tactile sensation is felt when user is in contact with actuating motor) to generate a haptic effect (vibration pattern) associated with the input signal (see Fig. 1, Keypad 108) in response to the user touching (see Paragraph 17, Lines, 6-10; Note, a user composes a tactile pattern using a key on Keypad 108 then transmits the tactile pattern to another user with the mobile phone) the subset.

As to claim 7, Kaaresoja '471 teaches, the method of claim 6 further comprising extracting information (editing them, see Paragraph 31, Line 10; Note, in order to edit the vibration

pattern, various of mode/information of vibration motor must be known and extracted) corresponding to the haptic effect from the input signal (see Paragraphs 32 and 33; Note various effect of vibration pattern can be generated by adjusting the frequency and amplitude).

As to claim 8, Kaaresoja '471 teaches, the method of claim 6 further comprising causing a content of the input signal to be displayed, the content includes at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Paragraph 18, Line 4), and a graphical feature (pictures, see Paragraph 18, Line 3).

As to claim 9, Kaaresoja '471 teaches, the method of claim 6 wherein the user-interface member includes one of a key, a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member list given above).

As to claims 10, 12, and 13, they are directed to a computer-readable medium on which

is encoded program code to implement the methods as set forth in claims 1, 3, and 4 respectively. Therefore, they are rejected on the same basis as set forth hereinabove.

Referring to claim 19, Kaaresoja '471 teaches, as claimed, a handheld communication device, comprising:

a body (see Fig. 1, a Block Diagram of a mobile phone);

a plurality of user-interface member (keys on keypad, see Fig. 1, Keypad 101) coupled to the body;

a processor (see Fig. 1, Controller 106) in data communication with the plurality of user-interface members (Note, Controller 106 communicatively receives data from the Keypad 101);

an actuator (see Fig. 1, Vibration motor 100) coupled to a subset (a key on the keypad, see Fig. 1, Keypad 101; Note, Vibration motor 100 is coupled mobile phone; therefore, it is coupled to the keys on the keypad) of the plurality of user-interface members and in data communication with the

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processor (see Fig. 1, data path labeled 'control signal');  
and

a memory (see Fig. 1, Memory 140) in data communication with the processor (see Fig. 1, three data paths between Controller 106 and Memory 140), the memory storing program code (see Fig. 1, Vibration pattern interpreter 140a, composer 140b, downloader 140c, and selector 140d) executable by the processor, including:

program code (see Fig. 1, Vibration pattern selector 140d) for producing a haptic stimuli with the (see Fig. 1, Keypad 108) subset;

program code (see Fig. 1, Vibration pattern composer 140a) for associating a haptic code with the haptic stimuli (Note, determining or composing a tactile icon into a vibration pattern);

program code for receiving an input signal including information corresponding to the haptic code (editing them, see Paragraph 31, Line 10; Note, in order to

edit the vibration pattern, various mode/information of vibration motor must be known and extracted).

Referring to claim 26, Kaaresoja '471 teaches, as claimed, a handheld communication device, comprising:

a body (see Fig. 1, a Block Diagram of a mobile phone);  
a user-interface member (see Fig. 1, Keypad 101) coupled to the body;

a processor (see Fig. 1, Controller 106) in data communication with the user-interface member;

an actuator (see Fig. 1, Vibration motor 100) coupled to user-interface member and in data communication with the processor (see Fig. 1, data path labeled 'control signal');  
and

a memory (see Fig. 1, Memory 140) in data communication with the processor, the memory storing program code executable by the processor (see Fig. 1, three data paths between Controller 106 and Memory 140), including:

program code (see Fig. 1, Vibration pattern selector 140d) for receiving an input signal (see Fig. 1, Keypad 108);

program code (see Fig. 1, Vibration pattern composer 140a) for outputting a request (providing instruction, see Paragraph 31, Line 12) from the handheld communication device, (Note, a call or request for a communication via vibration pattern is made by one user input device on a mobile phone), to provide a perceivable stimuli by a user of the second handheld communication device, with the stimuli indicating that said user is to touch the user-interface member (see Paragraph 29, Lines 4-7; Note, the underlined claim language are constructed in the form of intended use language and do not provide any patentable weight to the claimed elements, see MPEP 2111.04; never the less, when user provide a perceivable stimuli by assigning the vibration pattern to an alarm, and when the alarm goes off, the stimuli indicates to user to turn off the alarm by touching one of the keys on keypad); and

program code (see Fig. 1, Vibration pattern interpreter 140a) for providing a control signal (see Fig. 1, data path labeled, 'control signal') to cause the actuator to produce a haptic stimuli using the user-interface member (see Fig. 1, data path labeled, 'tactile sensation patterns').

As to claims 21 and 28, Kaaresoja '471 teaches, the device of claims 19 and 26 respectively is one of a cellular phone (see Fig. 1, a Block Diagram of a Mobile Phone), a satellite phone, a cordless phone, a personal digital assistant, a pager, a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player (Note, the mobile phone is one of the device listed above).

As to claims 22 and 29, Kaaresoja '471 teaches, the device of claims 19 and 26 wherein the plurality of user-interface members includes at least one of a key (a key on keypad, see Fig. 1, Keypad 108), a button, a key pad (see Fig. 1, Keypad 108), a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob (Note, the Keypad 108 is one of the user-interface member listed above).



As to claims 23, Kaaresoja '471 teaches, the device of claim 19 wherein the memory further stores program code (see Fig. 1, Stored vibration pattern 140e) for sending the output signal to a remote handheld communication device (see Paragraph 18; Note, tactile icons composed from one device is sent to another remote device).

As to claims 25, Kaaresoja '471 teaches, the apparatus of claim 19 wherein the user-interface member (keys on Keypad, see Fig. 1, Keypad 108) is one of a plurality of user-interface members coupled to the body (see Fig. 1, Keypad 108; Note, a keypad consists of plurality of keys), the memory further storing a plurality of haptic codes (see Fig. 2, vibration patterns), each associated with one of the plurality of user-interface members according to a predetermined scheme (tactile icons, see Column 3, Lines 14-15).

As to claims 30, Kaaresoja '471 teaches, the apparatus of claim 26 wherein the memory further stores program code (see Fig. 1, Vibration pattern interpreter 140a) for extracting a haptic code (see Fig. 2, Vibration patterns) from the input signal, the control signal (see Fig. 1, data path labeled 'control signal') being based at least in part on the haptic code (Note, a control

signal to a Vibration motor is based on Vibration patterns generated or stored in the memory).

As to claims 24 and 31, Kaaresoja '471 teaches, the apparatus of claims 19 and 26 respectively further comprising a display device (see Fig. 1, Display 110) in communication with the processor (see Fig. 1, Controller 106), the memory (see Fig. 1, Memory 140) further storing program code for causing a content of the input signal to be displayed, the content includes at least one of a message (voice message, see Fig. 1, Loudspeaker 114), a video image (an animation, see Paragraph 18, Line 4), and a graphical feature (pictures, see Paragraph 18, Line 3).

### ***Response to Arguments***

Applicant's arguments filed 01/22/2008 have been fully considered but they are not deemed to be persuasive.

Applicant argues, regarding claims 1, 6, 10, 19, and 26, Kaaresoja et al. teaches having a user of a handheld device perceiving haptic messages independent of the regions of the handheld device that the user is touching. This is distinguishable from the claimed invention in which an input signal associated with an actuation of one of a plurality of

**user-interface members on a first handheld communication device is received. Applicants advocate this feature facilitate perception of haptic messages based upon the region of the handheld device that a user is touching (see Page 9, Paragraph 3, Lines 4-10).**

Examiner disagrees with applicant. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., 'perception of haptic messages based upon the region') are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, the paragraph 37 from applicant disclosure does not seem to support the notion that the perception of haptic messages are based upon or isolated to any particular region of the handheld communication device. Due to vagueness of the language in the Applicant's specification, Examiner request Applicant to pinpoint where this concept is further supported in the disclosure.

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Applicant argues, in addition claim 6 recite additional features that distinguish the claimed method from the cited prior art. Specifically, claim 6 further defines the method as including, inter alia, providing a control signal to an actuator to generate a haptic effect associated with the input signal in response to the user touching the subset of the plurality of user-interface members. See ¶ [0037]. Specifically, the haptic effect associated with the input signal does not occur upon receipt of the input signal. Rather the haptic effect occurs after a user touches the subset. Thus, there may be a delay between receipt of a signal indicating that a haptic effect is to be generated and the actual generation of the haptic effect. This is clearly absent from the cited prior art (see Page 10, Paragraph 3, Lines 1-8).

Examiner disagrees with applicant. Kaaresoja '471, discloses tactile icon (haptic effect associated with the input signal from the key stroke on the keypad on the first mobile phone) being sent via mobile phone communication system to the second mobile phone where there may be a delay between receipt of a signal indicating that a tactile sensation is to be generated and the actual generation of the tactile sensation.

### ***Conclusion***

The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure:

Ronkainen (U.S. Patent 6,850,150) discloses method of giving the user information on the operation of portable device using a tactile sensation.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun Nam whose telephone number is (571) 270-1725. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Henry W.H. Tsai/****Supervisory Patent Examiner, Art Unit 2184**